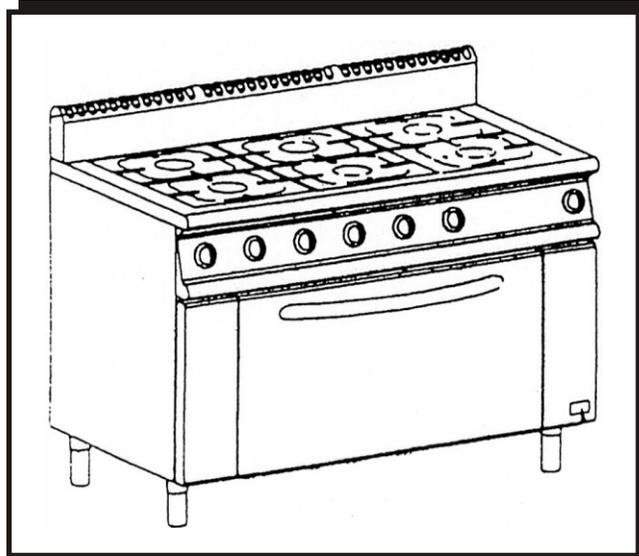


INSTALLATION, OPERATION AND MAINTENANCE

TSR - RANGE SERIES OWNERS MANUAL Models: TSR4, TSR6, TSR8, TSR10, TSR12



**INTENDED FOR OTHER THAN HOUSEHOLD USE
RETAIN THIS MANUAL FOR FUTURE REFERENCE**



FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapours or liquids in the vicinity of this or any other appliance.



WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the Installation, Operating and Maintenance Instructions thoroughly before installing or servicing this equipment.



Instruction to be followed in the event the user smells gas shall be posted in a prominent location. This information shall be obtained by consulting the local gas supplier.



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P/N 311020 11/10

TRI-STAR MANUFACTURING
2205 S0. Standard Ave.
Santa Ana CA 92707-3036.

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Thank you for buying a TSI appliance, with proper use this cooking range will give you years of service - please read the instructions in full.

Description:

This appliance is designed for the use in the gastronomy and confectionary industries, it is not designed for domestic use. These appliances are fitted with gas open burners and gas ovens as follows:

- TSR4 - 4 open burners one gas oven.
- TSR6 - 6 open burners one gas oven.
- TSR8 - 8 open burners two gas ovens .
- TSR10 - 10 open burners two gas ovens.
- TSR 12 - 12 open burners two gas ovens.

Construction:

Heavy duty steel base, with visible surfaces of brushed stainless steel (galvanised sheet steel to rear). Oven liner is of black enamel to sides and floor. Open burner pan supports are of heavy duty cast iron.

Safety:

Being an appliance designed only for professional use, it should be operated by qualified personnel only.
Never leave the appliance unattended while it is on.

If you smell gas -- do not light appliance -- switch off at Isolating valve and contact your gas supplier or Corgi engineer. (Must be Commerical Catering equipment registered).

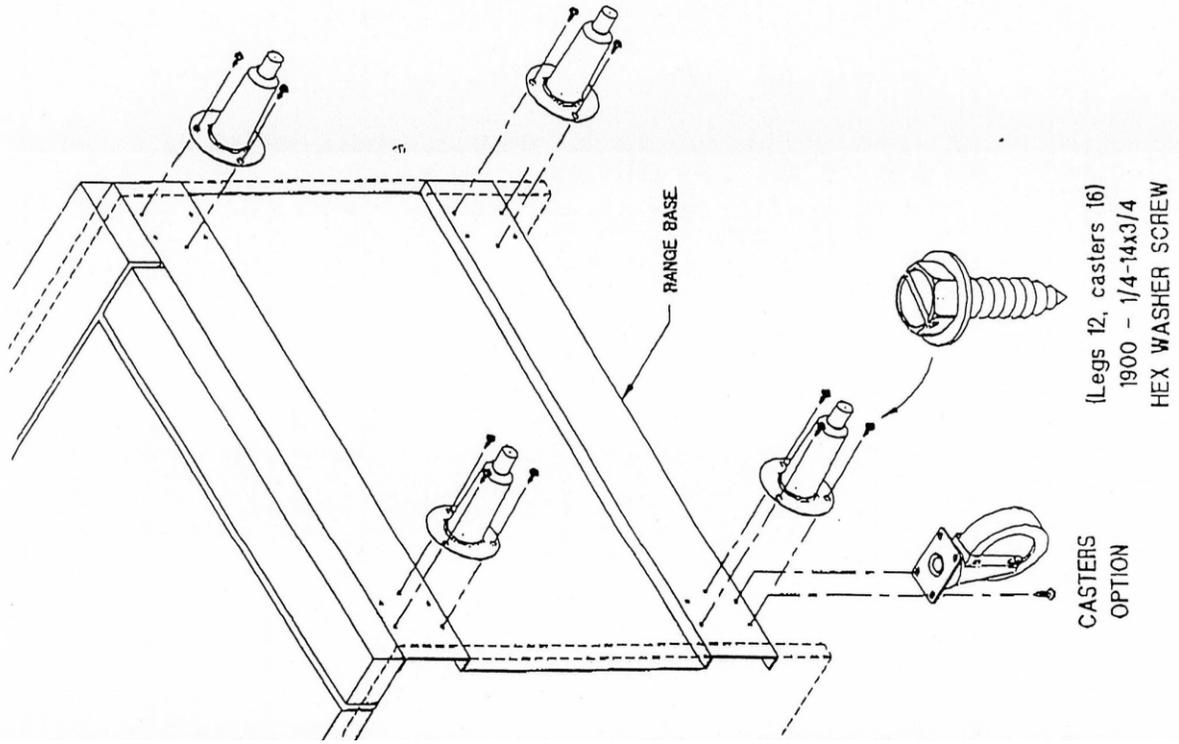
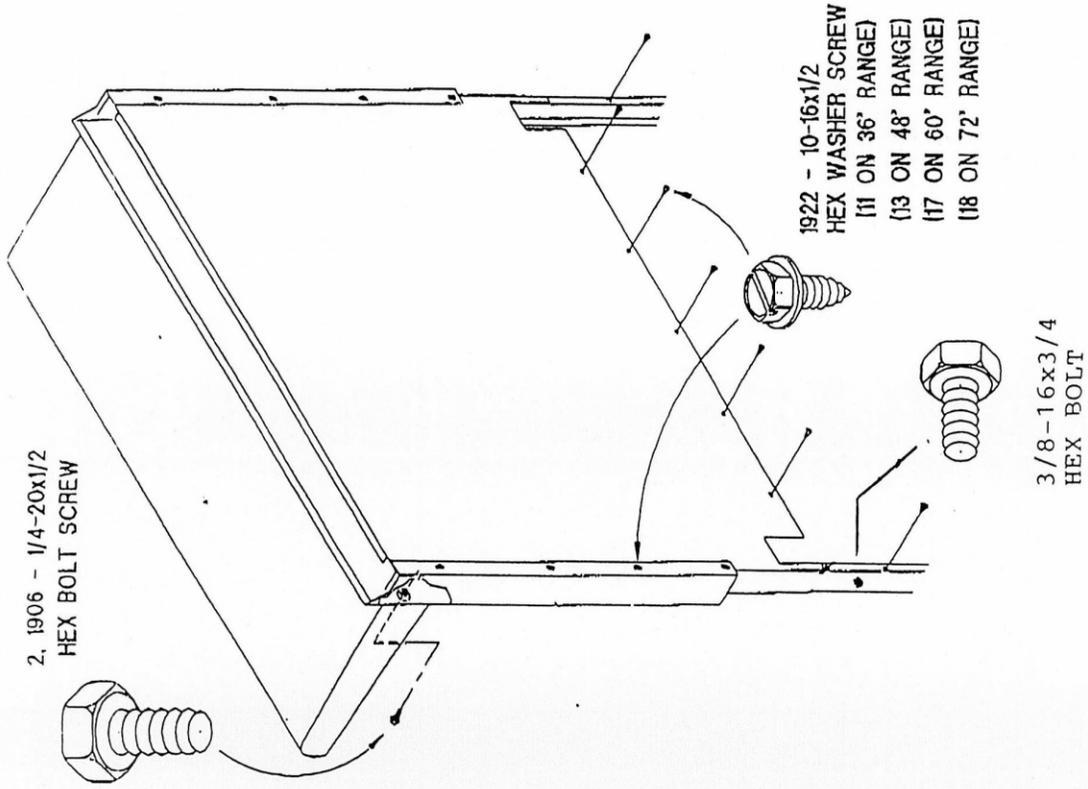
Preparing the appliance for use:

Unpack appliance and inspect for any damage . All damage must be reported within 24 hours of delivery.

Fit legs or casters depending on your order requirement -- using the large self tapping screws supplied.
Fit burner and oven knobs (supplied loose) accordingly.

Fit backsplash with shelf -- see drawing on next page

INSTRUCTIONS INSTALLATION OF RANGE LEG AND BACKGUARD



Gas Connection Pipework:

The size of the supply pipe for Natural gas should not be less than ¾" B.S.P. An easily accessible Shut Off valve must be fitted in the gas supply adjacent to the appliance. The gas governor regulator supplied with the appliance **must always be fitted** (including Lpg use) and should be sited between the Shut off valve and appliance .

Before installing appliance always check, using a qualified engineer, that your gas pipe is of large enough size for the appliance -- **Warranty will be invalidated if undersized o pipe work is used.**

Set up gas pressure:

When installing on natural gas (G20) -- the manifold pressure should be 5" WC (12.45 mbar) .

When installing on Lpg (G31) -- the manifold pressure should be 10" WC (24.9 mbar) .

When the pressure is being set all burners and Oven(s) should be on at maximum setting.

Technical specification:

Open burners are 35000 btu's each (10.25 kw) = .94 cu mtrs/hour = .67 kg/hr

Ovens -- TSR4 and TSR8 are 30000 btu's (8.79kw) each = .79 cu mtrs/hour = .56kg/hr

Ovens -- TSR6 , TSR10 and TSR12 are 40000 btu's (11.72 kw) each = 1.025 cu mtrs/hour = .73kg/hr

Total gas power:

TSR4 = 49.81kw.
(170,000 Btu/Hr)

TSR6 = 73.27kw.
(250,000 Btu/Hr)

TSR8 = 99.64
(310,000 Btu/Hr)

TSR10 = 123.06kw.

TSR12 = 146.5kw.

Injector sizes:

Open burner Natural gas injector = 2.6mm / Size 37

Open burner LPG injector = 1.6mm / Size 52

TSR4, TSR8 Natural gas Oven burner injector = 1.8mm / Size 50

TSR6, TSRI 0, TSRI2 Natural gas oven burner injector = 2.1mm / Size 46

TSR4, TSR8 LPG gas Oven burner injector = 1.2mm / Size 56

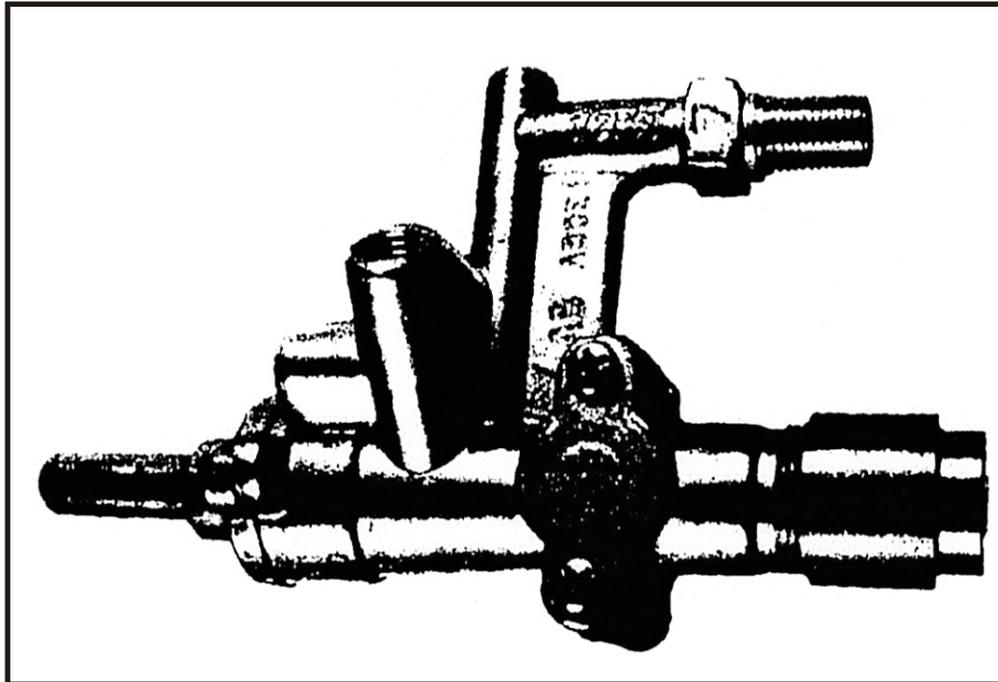
TSR6, TSRI0, TSRI2 LPG gas oven burner injector = 1.3mm / Size 55

Oven - Natural gas pilot injector = 3.7mm / Size 26

Oven - LPG gas pilot injector = 4.3mm / Size 18

Adjusting minimum output on open burner:

To adjust the flame when on minimum setting, remove the control knob, insert a screwdriver through the hole and adjust the screw I, until a stable and even flame is achieved.



1. Screw to adjust minimum output
2. Gas inlet pipe fitting
3. Thermocouple pipe fitting
4. Gas outlet pipe fitting

Final Checks:

- Start appliance by following operating instructions
- Check for leaks
- Check for flame stability throughout the ON-OFF-ON control range
- Check the lighting process along the main burner and check flames are even
- Check that flame on open burner keeps in touch with the thermocouple (adjust as above)
- Check for proper operation of oven pilot flame
- Check there is a good inflow of fresh air

OPERATING INSTRUCTIONS

Turning the open burners on and off:

- To light the burner, push in the required knob and turn it anti clockwise to the position shown in Fig 2.
- Whilst pushing in the knob, light the burner, and hold in for a further 15 seconds, to allow the thermocouple to activate . If the flame goes out repeat this operation.
- The burner flame can be adjusted by setting the knob position at a point between Fig. 2 and Fig. 3.
- To turn off the flame -- turn the knob in a clockwise direction to the "OFF" position. Fig. 1

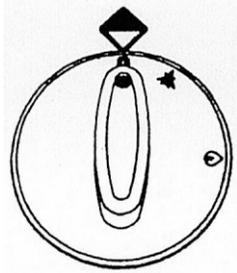


Fig. 1 - Off

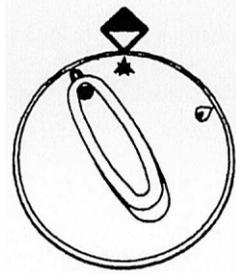


Fig. 2 - Ignition &
Low Flame

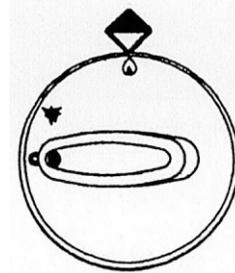


Fig. 3 - High Flame

Turning on the Oven Burner - using the Oven knob:

- To light the gas oven pilot flame - push in and turn the knob in an counter clockwise direction to the position shown in Fig. 5.
- Whilst pushing in the knob - push in and release the ignition button several times. The ignition button is found by dropping down the small flap below the oven door.
- Check the pilot is lit, by looking through the hole located to the left of the ignition button, continue to push in the oven knob for 15 seconds to allow thermocouple to activate. If the pilot flame goes out repeat above procedures.
- Set oven temperature by selecting required temperature shown on the knob, turn knob in an counter clockwise direction - these temperatures are in degrees Centigrade. Fig. 6.
- To turn off the main burner and leave on pilot, turn the knob in a clockwise direction to the ignition position, Fig. 5. If you leave the oven on pilot, the main burner will automatically re-light when you select the temperature.
- To turn off oven and pilot - turn the oven knob in a clockwise direction to the "OFF" position. Fig. 4.



Fig. 4 - Off



Fig. 2 - Ignition & Pilot



Fig. 3 - Temperature Setting °C

MAINTENANCE INSTRUCTIONS

Open Burners:

Daily:

1. Clean top grates with warm water, mild cleanser and wire brush
2. Clean and brush off debris from and around the burner
3. Empty and clean grease pan

Periodic:

1. Remove burner and clean with warm water and wire brush. Make sure burner holes are not clogged.

Tristar 6 Burner

NOTE: If pilot light fails to remain lit. Check that the flame is touching the thermocouple, check for debris from spillages.

Incorrectly positioned or blocked pilot lights and loose thermocouple connections are not classed as warranty issues.

Care must be taken when replacing pan supports to ensure that they are the correct way around which gives clearance to the pilot light.

Oven - Daily:

1. Wipe clean the inside of the oven - making sure you do not touch the thermostat probe on the oven ceiling. Scrape any food deposits of the base of the oven with a Nylon or non abrasive scraper.
2. Remove oven shelf and clean with soapy water.

Gas valves must not be touched unless by an authorised engineer.

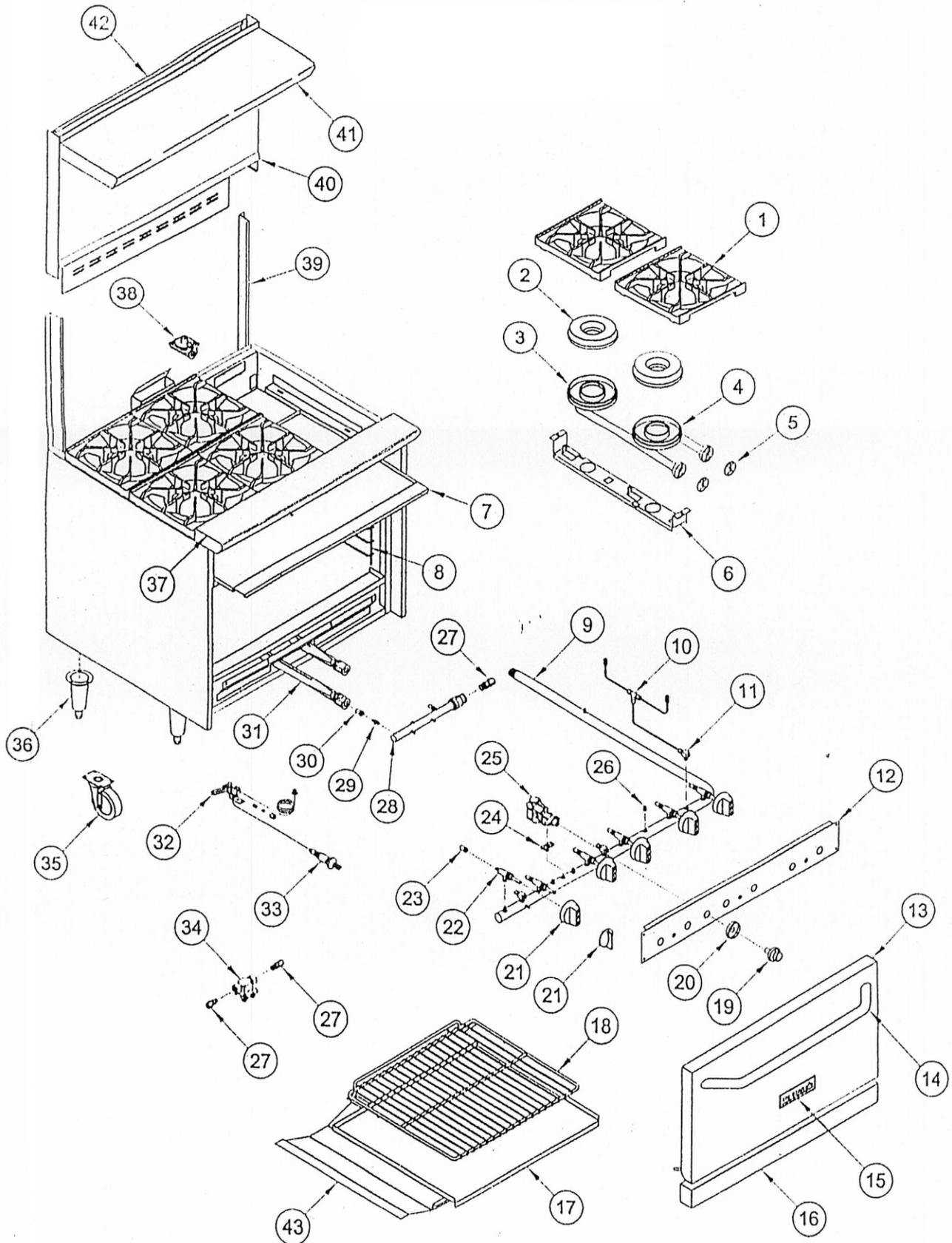
Stainless Steel Parts:

Do not use steel wool, abrasive cloths, cleansers or powders to clean stainless steel surfaces, only use hot soapy water during the day and a stainless steel liquid cleaner at the end of the day. To remove encrusted materials, soak in hot water to loosen the material then use a wood or nylon scraper.

Please note - If equipment is not regularly cleaned or looked after your Warranty will be invalidated.

All gas appliances should be serviced at least once a year.

TRI-STAR - RANGE SERIES



ITEM NO.	PART NO.	DESCRIPTION
1	TS-1233	TOP GRATE -12" x 12"
2	TS-1230	BURNER HEAD (ANTI-CLOG)
3	TS-1232	VENTURI - REAR
4	TS-1231	VENTURI - FRONT
5	TS-I007	AIR SHUTTER
6	TS-21015	BURNER HANGER
7	TS-20002	24" CRUMB TRAY
	TS-20003	36" CRUMB TRAY
	TS-20004	48" CRUMB TRAY
8	TS-20009	RACK GUIDE - RIH
	TS-20000	RACK GUIDE - UH
9	TS-1360	24" MANIFOLD PIPE
	TS-1361	36" MANIFOLD PIPE
	TS-1362	48" MANIFOLD PIPE
	TS-1363	60" MANIFOLD PIPE
	TS-1364	72" MANIFOLD PIPE
10	TS-21070	PILOT BURNER ASSY COMPLETE FRONT & BACK
11	TS-1609	PILOT VALVE- 1/0 NPT x 3/16 CC x 900
	TS-1630	FERRULE - 3/16 CC
	TS-1636	COMPRESSION FITTING - 3/16 CC
12	TS-13010	24" VALVE COVER ,
	TS -13012	36" VALVE COVER
	TS -13013	40" VALVE COVER
	TS-13014	60" VALVE COVER
	TS-13015	72" VALVE COVER
13	TS-20091	30" OVEN DOOR ASSY
	TS-20090	20" OVEN DOOR ASSY
14	TS-20153	30" OVEN DOOR HANDLE
	TS-20152	20" OVEN DOOR HANDLE
15	T5-1204	LOGO (TRI-STAR)
16	TS-20143	30" KICK PLATE
	TS-20142	20" KICK PLATE
17	TS-20159	30" OVEN BOTTOM
	TS-20150	20" OVEN BOTTOM
18	TS-2021	30" OVEN RACK
	TS-2020	20" OVEN RACK
19	TS-1106	KNOB - THERMOSTAT
20	TS-1105	BEZEL - THERMOSTAT
21	TS-2720	KNOB - GAS VALVE (3 STAR PLASTIC)
	TS-27051	KNOB - GASVALVE (CHROME w/ser SCREW)
22	TS-1610	GAS VALVE
23	TS-1700-37	ORIFICE HOOD - 2.6mm (35,000 BTU - NAT)
	TS-1700-51	ORIFICE HOOD - 1.7mm (35,000 BTU - PROP)
	TS-1700-34	ORIFICE HOOD - 2.8mm (40,000 BTU - NAT) OPTIONAL
	TS-1700-50	ORIFICE HOOD - 1.8mm (40,000 BTU - PROP) OPTIONAL
24	TS-1104	THERMOSTAT FLANGE I (SADDLE)
25	TS-1150R	OVEN THERMOSTAT FACING IT RIGHT INLET
	TS-1150L	OVEN THERMOSTAT FACING IT LEFT INLET
25A	TS-1100	GRIDDLE THERMOSTAT

ITEM NO.	PART NO.	DESCRIPTION
26	TS-1013	PLUG - 1/8 NPT
27	TS-1605	FITTING (STRAIGHT) - 1/4 NPT x 3/8 CC
28	T5-23039	OVEN MANIFOLD PIPE
29	TS-23094	ORIFICE HOOD ADAPTER - 3/8
30	TS-1700-46	30" OVEN - ORIFICE HOOD - 2.1mm (NAT)
	TS-1700-55	30" OVEN - ORIFICE HOOD - 1.3mm (PROP)
	TS-1700-50	20" OVEN - ORIFICE HOOD - 1.8mm (NAT)
	TS-1700-56	20" OVEN - ORIFICE HOOD - 1.2mm (PROP)
31	T8-1020	OVEN BURNER
32	TS-10979	PILOT- OVEN (NAT)
	TS-10989	PILOT- OVEN (LP)
	T8-1025-26	PILOT BELL ORIFICE - 4.9mm (NAT)
	TS-1025-16	PILOT BELL ORIFICE - 4.3mm (LP)
	TS-1630	PILOT FERRULE (3/16 CC)
	TS-1636	PILOTNUT (3/16CC)
33	TS-1075	PIEZO
34	TS-1110	SAFETY VALVE
35	TS-1061	CASTER W/BRAKE (FRONT)
	TS-1060	CASTER W/O BRAKE (REAR)
36	TS-20130	LEG - 6"
37	TS-21012	12" LANDING LEGDE
	TS-21000	24" LANDING LEGDE
	TS-21001	36" LANDING LEGDE
	TS-21002	48" LANDING LEGDE
	TS-21003	60" LANDING LEGDE
	TS-21004	72" LANDING LEGDE
38	TS-1050	REGULATOR (NAT)USED ON 24" 36" UNITS
	TS-1051	REGULATOR (LP) US-D 'ON 24" 36" UNITS
	TS-1053	REGULATOR (NAT) HIGH CAPACITY USED ON 48" 60" 72" UNITS
	TS-1053L	REGULATOR (L.P.) HIGH CAPACITY USED ON 48" 60" 72" UNITS
39	TS-20030R	HI-SELF SUPPORT CHANNEL - R/H
	TS-20030L	HI-SELF SUPPORT CHANNEL - L/H
40	TS-20100	24" HI-SHELF FRONT PANEL
	TS-20101	36" HI-SHELF FRONT PANEL
	TS-20102	40" HI-SHELF FRONT PANEL
	TS-20103	60" HI-SHELF FRONT PANEL
	TS-20104	72" HI-SHELF FRONT PANEL
41	TS-20190	24" HI-SHELF
	TS-20191	36" HI-SHELF
	TS-20192	40" HI-SHELF
	TS-20193	60" HI-SHELF
	TS-20194	72" HI-SHELF
42	TS-21085	24" HI-SHELF BACK PANEL
	TS-21086	36" HI-SHELF BACK PANEL
	TS-21007	48" HI-SHELF BACK PANEL
	TS-21000	60" HI-SHELF BACK PANEL
	TS-21089	72" HI-SHELF BACK PANEL
43	TS-20135	OVEN FLAME SPREADER

TRI-STAR TERMS OF SALE & LIMITED WARRANTY FOR U.S.A. INSTALLATION

TERMS - 1%-10 days, n/30 days subject to credit approval. All accounts past due are subject to 1-1/2% per month service charge.

FOB - Factory / Santa Ana, CA 92707

PRICES - Prices are subject to change without notice. Prices do not include sales tax. All prices are in U.S. Dollars.

POSSESSION - of this price list does not constitute an agreement or an offer to sell.

NOTE - The company reserves the right, without prior notice, to make changes and revisions in product specifications, design and material; which in the opinion of the company will provide greater performance, efficiency, and durability.

SHIPMENTS - The Company's responsibility ceases with delivery of goods to the transportation company after receiving a receipt for them in "Good Order". In case of freight damage, do not refuse shipment, but call agents attention to its condition and make a careful note of details on freight bill before charges are paid. In case of concealed damages, immediately notify freight agent in writing (retaining a duplicate copy) notifying them of your intention to file claim, so that they may inspect shipment and provide necessary forms for filing claim . Retain all packaging and do not remove from delivery site.

RETURNED GOODS - Returned goods are subject to a 20% restocking charge and the cost of reconditioning. Prior to shipping, a Return Goods Authorization (RA) number must be granted by Tri-Star all returned goods must be shipped freight prepaid. Shipments without RA number will be refused. Custom units built to buyer specifications may not be returned or canceled.

LIMITED WARRANTY

TRI-STAR warrants its new Product (s) to be free from defects in material and workmanship for a period of one (1) year from the original date of installation not to exceed 18 months from date of shipment from our factory. Equipment sold and installed for residential use, or outside the continental United States is excluded from this warranty.

This warranty is limited to Product(s) sold to the original commercial user. The liability of **TRI-STAR** is limited to, at **TRI-STAR**'s option, the repair or replacement of any part found by **TRI-STAR** to be warranted herein. **TRI-STAR** shall bear the normal labor charges for repair or replacement to the extent that such repair or replacement is performed within 35 miles of the office of an authorized service agency, within the continental United States and during regular (straight time) hours. Travel outside of the 35 miles and any work performed at overtime or weekend rates would be the responsibility of the owner/user. Defective parts must be returned to **TRI-STAR**, freight prepaid, for Warranty Inspection.

TRI-STAR assumes no responsibility for any product not installed properly in accordance with the instructions supplied with the equipment. Any equipment which has been modified by unauthorized personnel or changed from our original design is not covered under this Warranty. Furthermore, **TRI-STAR** assumes no obligation for any product which has been subject to misuse, abuse or harsh chemicals. Normal maintenance as outlined in the instructions is the responsibility of the owner-user and is not a part of this warranty. * Ninety days on Cast Iron Parts.

Light bulbs, porcelain, and glass components are excluded from this warranty.

Fryers: one year parts and labor, Limited Warranty on the fry tank: 5 years, prorated on stainless steel fry tank. Normal parts wear and maintenance is also not covered by this warranty. This warranty is in lieu of any other agreement, expressed or implied, and constitutes the only warranty of **TRI-STAR** with respect to the products.

This states the exclusive remedy against **TRI-STAR** relating to the product(s) whether in contract or in tort or under any other legal, theory, and whether arising out of warranties, representations, instruction, installation or defects from any cause.

TRI-STAR shall not be liable whether in contract or in tort or under any other legal theory, for loss of revenue or profit, or for any substitute use or performance, or for incidental, indirect, special or consequential damages, or for any other loss or cost of similar type.

Proper installation, initial check out, air shutter adjustments, or normal maintenance such as lubrication, adjustment or calibration of controls is the responsibility of the dealer, owner-user or installing contractor and is not covered by this warranty.



Prices listed in this catalog are in U.S. Dollars. All Prices are subject to change without prior notification. TRI-STAR is not responsible for printing errors in pricing or specifications.